

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1821	virtual with shop\$4	US-PGPUB; USPAT	OR	ON	2006/06/17 14:45
L2	12	users with access\$4 with "same" with web\$page	US-PGPUB; USPAT	OR	ON	2006/06/17 10:33
L8	34	(user or client) with (plurality or multiple) with (access\$4 or brows\$4) with web\$page	US-PGPUB; USPAT	OR	ON	2006/06/17 10:44
L9	273	(user or client) with (plurality or multiple) with (access\$4 or brows\$4) with (web\$site or web\$page)	US-PGPUB; USPAT	OR	ON	2006/06/17 10:34
L10	251965	synchroniz\$4	US-PGPUB; USPAT	OR	ON	2006/06/17 10:35
L11	7	8 and 10	US-PGPUB; USPAT	OR	ON	2006/06/17 10:36
L12	8257	(user or client) with (updat\$4 or chang\$4) with (page or web\$page or web\$site)	US-PGPUB; USPAT	OR	ON	2006/06/17 10:35
L13	3	11 and 12	US-PGPUB; USPAT	OR	ON	2006/06/17 10:35
L14	15	8 and 12	US-PGPUB; USPAT	OR	ON	2006/06/17 10:36
L15	12	14 not 13	US-PGPUB; USPAT	OR	ON	2006/06/17 10:38
L16	5021	(user or client) with collaborat\$4	US-PGPUB; USPAT	OR	ON	2006/06/17 10:38
L18	2	8 and 16	US-PGPUB; USPAT	OR	ON	2006/06/17 10:38
L19	1	("20010016872").PN.	US-PGPUB; USPAT	OR	OFF	2006/06/17 12:37
L20	1	19 and question	US-PGPUB; USPAT	OR	ON	2006/06/17 13:37
L22	7	virtual with shop\$4 with collaborat\$4	US-PGPUB; USPAT	OR	ON	2006/06/17 14:46
L23	12	(virtual with shop\$4) same collaborat\$4	US-PGPUB; USPAT	OR	ON	2006/06/17 14:46
L24	5	23 not 22	US-PGPUB; USPAT	OR	ON	2006/06/17 14:46
L25	1310	(715/501.1).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/06/17 15:03
L26	2687	(715/513).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/06/17 15:04

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L27	608	(715/526).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/06/17 15:04
L28	427	(715/751).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/06/17 15:04
S1	1159	(715/500).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/06/17 15:02

	Document ID	Issue Date	Title	Current OR
1	US 20060117269 A1	20060601	Method for displaying multiple frames on small screen of communication device	715/781
2	US 20060101098 A1	20060511	Session initiation protocol call center	707/204
3	US 20060064411 A1	20060323	Search engine using user intent	707/3
4	US 20060027662 A1	20060209	Color-coding system	235/469
5	US 20050229241 A1	20051013	Management of multiple network devices using unsigned java applets	726/7
6	US 20050130611 A1	20050616	THE INTEGRATED COMMUNICATION TERMINAL FOR NEXT GENERATION MOBILE TELECOMMUNICATIONS	455/130
7	US 20050108033 A1	20050519	Communication among browser windows	705/1
8	US 20050060754 A1	20050317	Apparatus and method for distributed control of media dissemination	725/112
9	US 20050044010 A1	20050224	System and method of producing construction specifications	705/26
10	US 20040268256 A1	20041230	Program, character inputting and editing method, apparatus and storage medium	715/531
11	US 20040230492 A1	20041118	Method and apparatus for Internet marketing and transactional development	705/26

	Document ID	Issue Date	Title	Current OR
12	US 20040215719 A1	20041028	Method and system for designing, editing and publishing web page content in a live internet session	709/204
13	US 20040143591 A1	20040722	Method and system for database-driven, scalable web page development, deployment, download, and execution	707/102
14	US 20040049541 A1	20040311	Information retrieval and display system	709/203
15	US 20040031856 A1	20040219	Physical presence digital authentication system	235/492
16	US 20040010448 A1	20040115	System and method for marketing advertising space on disposable consumer items	705/14
17	US 20030202009 A1	20031030	Integration toolbar	715/739
18	US 20030140089 A1	20030724	Inter-applet communication using an applet agent	709/202
19	US 20030083108 A1	20030501	Method of editing information related to a picture file displayed on a cellular telephone	455/566
20	US 20020193969 A1	20021219	System and method for monitoring gas turbine plants	702/188
21	US 20020178225 A1	20021128	System and method for providing on-line extensions of off-line places and experiences	709/206

	Document ID	Issue Date	Title	Current OR
22	US 20020135580 A1	20020926	Methods and systems for simulating animation of web-based data files	345/473
23	US 20020091770 A1	20020711	Method of and system for communication, communication information-processing unit, information terminal, and computer product	709/205
24	US 20020082930 A1	20020627	Method and apparatus for internet marketing and transactional development	705/26
25	US 20010016872 A1	20010823	Information control system, information processing support server, information processing terminal, information processing method, storage storing information processing program, and program transmission apparatus	709/205
26	US 7035830 B1	20060425	Method and apparatus for remote filing and recordation of documents	705/52
27	US 7019741 B2	20060328	Methods and systems for simulating animation of web-based data files	345/419
28	US 6973627 B1	20051206	Website display emulating a display of an application program	715/781

	Document ID	Issue Date	Title	Current OR
29	US 6832388 B1	20041214	Personal computer used in conjunction with television to display information related to television programming	725/110
30	US 6813248 B1	20041102	Distributed internet user experience monitoring system	370/252
31	US 6631512 B1	20031007	Method and system for database-driven, scalable web page development, deployment-download, and execution	717/100
32	US 6607136 B1	20030819	Physical presence digital authentication system	235/492
33	US 6542856 B2	20030401	System and method for monitoring gas turbine plants	702/188
34	US 6279907 B1	20010828	Spacial game board with spacial chess and spacial checkers	273/241


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1 [MultECommerce: a distributed architecture for collaborative shopping on the WWW](#)



Stefano Puglia, Robert Carter, Ravi Jain

 October 2000 **Proceedings of the 2nd ACM conference on Electronic commerce**

Publisher: ACM Press

 Full text available: [pdf\(690.44 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: WWW engineering, component technologies, e-commerce APIs, e-commerce architectures, enterprise JavaBeans, shared navigation

2 [ATLAS: a scalable network framework for distributed virtual environments](#)



Dongman Lee, Mingyu Lim, Seunghyun Han

 September 2002 **Proceedings of the 4th international conference on Collaborative virtual environments**

Publisher: ACM Press

 Full text available: [pdf\(129.14 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

A distributed virtual environment (DVE) is a software system that allows users on a network to interact with each other by sharing a common view of their states. As users are geographically distributed over large networks like the Internet and the number of users increases, scalability is a key aspect to consider for real-time interaction. Various solutions have been proposed to improve the scalability in DVE systems but they are either focused on only specific aspects or customized to a target ...

Keywords: DVE, network framework, scalability

3 [Distributed VR: The role of structural reflection in distributed Virtual Reality](#)



Paul Okanda, Gordon Blair

 October 2003 **Proceedings of the ACM symposium on Virtual reality software and technology**

Publisher: ACM Press

 Full text available: [pdf\(919.48 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

The emergence of collaborative virtual world applications that run over the Internet has presented Virtual Reality (VR) application designers with new challenges. In an

environment where the public internet streams multimedia data and is constantly under pressure to deliver over widely heterogeneous user-platforms, there has been a growing need that distributed virtual world applications be aware of and adapt to frequent variations in their context of execution. In this paper, we argue that in c ...

Keywords: Distributed Virtual Environment (DVE), Virtual Reality (VR), adaptation, object behaviour, reflection

4 Collaboration in Virtual Environments: SmartCU3D: a collaborative virtual environment system with behavior based interaction management



Weihua Wang, Qingping Lin, Jim Mee Ng, Chor Ping Low

November 2001 **Proceedings of the ACM symposium on Virtual reality software and technology**

Publisher: ACM Press

Full text available: pdf(1.12 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

To support real-time natural interaction in the Collaborative Virtual Environment (CVE) with limited network bandwidth and computer processing power, the development of an efficient interaction management mechanism is a key issue. In this paper, we propose a behavior based interaction management mechanism for managing the collaborative interactions among the distributed users in our developed SmartCU3D, an Internet CVE system. With this mechanism, message routing in the system becomes adaptive t ...

Keywords: behavior, collaborative virtual environment, interaction management

5 A QoS architecture for collaborative virtual environments



Chris Greenhalgh, Steve Benford, Gail Reynard

October 1999 **Proceedings of the seventh ACM international conference on Multimedia (Part 1)**

Publisher: ACM Press

Full text available: pdf(1.43 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We present a QoS architecture for collaborative virtual environments (CVEs), focusing on the management of streamed video within shared virtual worlds. Users express QoS requirements by negotiating levels of mutual awareness using our previously defined spatial model of interaction. The architecture uses these awareness values as part of dynamic QoS management. A key aspect of the architecture is that it maintains a balance between the needs of a group of users as a whole (e.g., which strea ...

Keywords: QoS architectures, awareness driven video QoS, collaborative virtual environments

6 Music and digital libraries: from users to algorithms: An ethnographic study of music information seeking: implications for the design of a music digital library

Sally Jo Cunningham, Nina Reeves, Matthew Britland

May 2003 **Proceedings of the 3rd ACM/IEEE-CS joint conference on Digital libraries**

Publisher: IEEE Computer Society

Full text available: pdf(156.59 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

At present, music digital library systems are being developed based on anecdotal evidence of user needs, intuitive feelings for user information seeking behavior, and a

priori assumptions of typical usage scenarios. Emphasis has been placed on basic research into music document representation, efficient searching, and audio-based searching, rather than on exploring the music information needs or information behavior of a target user group. This paper focuses on eliciting the native music informa ...

7 VIRTUS: a collaborative multi-user platform



Kurt Saar
February 1999 **Proceedings of the fourth symposium on Virtual reality modeling language**

Publisher: ACM Press

Full text available: pdf(4.09 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: VRML, VRML event model, architecture construction engineering (ACE), collaborative virtual environment (CVE), computer supported collaborative work (CSCW), dead reckoning, distributed environments, living worlds, multi-user technologies, virtual environments, virtual worlds

8 Gaming: CSCW at play: 'there' as a collaborative virtual environment



Barry Brown, Marek Bell
November 2004 **Proceedings of the 2004 ACM conference on Computer supported cooperative work**

Publisher: ACM Press

Full text available: pdf(547.55 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Video games are of increasing importance, both as a cultural phenomenon and as an application of collaborative technology. In particular, many recent online games feature persistent collaborative virtual environments (CVEs), with complex social organisation and strong social bonds between players. This paper presents a study of *'There'*, one such game, focusing on how *'There'* has been appropriated by its players. In particular we describe how its flexibility has all ...

Keywords: CVEs, entertainment, ethnography, games

9 Session 1C: human interactions and perceptions: FreeWalk/Q: social interaction platform in virtual space



Hideyuki Nakanishi, Toru Ishida
November 2004 **Proceedings of the ACM symposium on Virtual reality software and technology VRST '04**

Publisher: ACM Press

Full text available: pdf(1.25 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We have integrated technologies related to virtual social interaction, e.g. virtual environments, visual simulations, and lifelike characters. In our previous efforts to integrate them, the asymmetry between agents and avatars made the systems too complex to be used widely. Another crucial problem we faced is that it took a long time to construct agents that play various roles, since each role needs its specific behavioral repertory. To eliminate these problems, we developed a general-use platfo ...

Keywords: agent, avatar, interaction platform, scenario description, social interaction, virtual city, virtual community, virtual space, virtual training

10 Full Papers: Annotating and sketching on 3D web models



Thomas Jung, Mark D. Gross, Ellen Yi-Luen Do

January 2002 **Proceedings of the 7th international conference on Intelligent user interfaces****Publisher:** ACM Press

Full text available: pdf(1.03 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper reports on our progress and findings in building a Web annotation system for non-immersive 3D virtual environments. Over the last two years, we developed and tested two systems for collaborating designers to comment on virtual 3D models. Our first system, Redliner [12] lets design team members browse and leave text annotations on surfaces in three-dimensional models. Experience with Redliner, including two user evaluations in different settings, led us to develop Space Pen [13], a sec ...

Keywords: 3D models, Java 3D, VRML, annotation, collaboration, gesture recognition, pen-based interface, sketch in 3D



11 An investigation into the effects of Text-To-Speech voice and 3D avatars on the perception of presence and flow of live help in electronic commerce



Lingyun Qiu, Izak Benbasat

December 2005 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 12
Issue 4**Publisher:** ACM Press

Full text available: pdf(3.19 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Expansion and growth of online shopping has led many companies to provide real-time communications on their Web sites to facilitate human-to-human interaction between service representatives and customers. The current study analyzes the interface design of such Live Help functions. More specifically, it attempts to understand whether or not the implementation of Text-To-Speech (TTS) voice communication and 3D avatars in the user interface of Live Help affects consumers' views of their own intera ...

Keywords: Electronic commerce, avatar, customer relationship management (CRM), flow, live help, social presence, telepresence, text-to-speech

12 Systems: A Java web application for allowing multiuser collaboration and exploration of existing VRML worlds



Clifton G. M. Presser

March 2005 **Proceedings of the tenth international conference on 3D Web technology****Publisher:** ACM Press

Full text available: pdf(383.32 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This work describes a new Java web application that enables users to explore and annotate VRML worlds collaboratively. The web application consists of a Java servlet, Java Server Pages (JSP) and supporting classes. There are two significant features of this work. First, users can explore existing standard VRML worlds collaboratively with automatic multiuser augmentation. Second, the user is free from the inconsistencies of interacting web browsers, a VRML browsers and a Java virtual machines. Th ...

Keywords: Collaboration, ECMAScript, JSP, Java, Servlet, VRML

13 Art session 1: augmented and virtual spaces for creative learning, collaboration, and play: "living-room": interactive, space-oriented augmented reality



Roderick Galantay, Jan Torpus, Maia Engeli

October 2004 **Proceedings of the 12th annual ACM international conference on Multimedia**

Publisher: ACM Press

Full text available:  pdf(346.06 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

living-room is an augmented reality (AR) installation developed to study interactive, space-oriented AR-scenarios. The installation consists of the living-room box, a room that is three by three meters, as well as hardware and software components to record the user's view and enhance it synthetically. Four scenarios have been realized and analyzed regarding the aspects 'Real and Virtual', 'Interaction' and 'Scenography'. A survey with visitors has been conducted and plans for the next phase o ...

Keywords: art installation, augmented reality, design research


14 Learning technologies: Virtual environments for social skills training: the importance of scaffolding in practice 



Steven J. Kerr, Helen R. Neale, Sue V. G. Cobb

July 2002 **Proceedings of the fifth international ACM conference on Assistive technologies**

Publisher: ACM Press

Full text available:  pdf(696.22 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Virtual Environments (VE's) offer the potential for users to explore social situations and 'try out' different behaviour responses for a variety of simulated social interactions. One of the challenges for the VE developer is how to construct the VE to allow freedom of exploration and flexibility in interactive behaviour, without the risk of users deliberately or inadvertently missing important learning goals. Scaffolding embedded within the VE software can aid the user's learning in different co ...

Keywords: Virtual Environments, autism, scaffolding of learning, social skills training


15 Transcending the individual human mind—creating shared understanding through collaborative design 



Ernesto Arias, Hal Eden, Gerhard Fischer, Andrew Gorman, Eric Scharff

March 2000 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 7 Issue 1

Publisher: ACM Press

Full text available:  pdf(1.68 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Complex design problems require more knowledge than any single person possesses because the knowledge relevant to a problem is usually distributed among stakeholders. Bringing different and often controversial points of view together to create a shared understanding among these stakeholders can lead to new insights, new ideas, and new artifacts. New media that allow owners of problems to contribute to framing and resolving complex design problems can extend the power of the individual human ...

Keywords: collaborative design and knowledge construction, design support systems, distributed cognition, integration of action and reflection spaces, integration of physical and computational environments, open systems, symmetry of ignorance

16 Developing a synchronous web seminar application for online learning 

Michael D. Ciocco, Neil Toporski, Michael Dorris

November 2005 **Proceedings of the 33rd annual ACM SIGUCCS conference on User**

services SIGUCCS '05**Publisher:** ACM PressFull text available: [pdf\(179.24 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Many higher education institutions are searching for cost effective tools for the delivery of a feature rich, synchronous online learning environment. While there are commercially viable web conferencing products available to enhance the online education experience, they tend to be cost prohibitive and are constrained by software and network limitations. Some universities have invested in products such as iLinc, Centra, and Horizon Live, but many academic institutions that would benefit from the ...

Keywords: collaboration, communication, conferencing, presentation, synchronous, virtual, web

17 Session 11B: distributed problem solving: Dealing with space in multi--agent**systems: a model for situated MAS**

Stefania Bandini, Sara Manzoni, Carla Simone

July 2002 **Proceedings of the first international joint conference on Autonomous agents and multiagent systems: part 3****Publisher:** ACM PressFull text available: [pdf\(189.32 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The paper introduces the Multilayered Multi--Agent Situated System (MMASS). The MMASS allows the description of situated agents that is, agents sensitive to the spatial relationships that determine constraints and abilities for actions as well as privileged cooperation relationships. The main feature of the MMASS model is to give an explicit definition of the spatial structure of the environment in which the system of situated agents acts and interacts. Agent environment, possibly multilayered, ...

18 Supporting communities: eCell: spatial IT design for group collaboration in school environments

Christina Brodersen, Ole Sejer Iversen

November 2005 **Proceedings of the 2005 international ACM SIGGROUP conference on Supporting group work GROUP '05****Publisher:** ACM PressFull text available: [pdf\(929.09 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper we present the eCell; a temporary, collaborative niche for group work in school environments. The eCell consists of a private inner display and a public outer display located in unused public spaces e.g. in corridors and libraries throughout the school premises. The inner display is a large touch-sensitive screen connected to a standard computer. The outer display consists of a projection on a large semitransparent surface. Combined, the two displays comprise an IT-supported, colla ...

Keywords: IT supported education, collaborative environments, eCell, project work

19 The electronics industry supply chain (panel session): who does what?

Rita Glover, Marc Halpern, Rick Becks, Richard Kubin, Henry Jurgens, Rich Cassidy, Ted Vucurevich

June 2001 **Proceedings of the 38th conference on Design automation DAC '01****Publisher:** ACM PressFull text available: [pdf\(115.57 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)

The makeup and relationships within the design supply chain are changing rapidly. One-stop shopping, whereby a system house procures most of its design and fabrication

services from a single source, is now being supplanted by a host of outsourcing suppliers. These players are developing online integration plat-forms for outsourced design engineering, business transactions, and data management. This evolution is being felt by the entire design automation industry, whether it be f ...

20 Browsing the WWW by interacting with a textual virtual environment—a framework for experimenting with navigational metaphors



Andreas Dieberger

March 1996 **Proceedings of the the seventh ACM conference on Hypertext**

Publisher: ACM Press

Full text available:  pdf(1.28 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: WWW, collaborative navigation, metaphors, navigation, spatial hypertext

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